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ABSTRACT

The goal of the Phoenix Pilot Drug Program is to provide a drug/alcohol free educational environment which will enable students to reduce their drug/alcohol usage and function in a regular school program. To determine the degree to which the program is accomplishing these short-term goals, and also to examine the adequacy of the counseling program, the academic environment, and the relationship between parents and school, process evaluation data were collected through observation of counseling sessions and classes; review of course materials, objectives, and school records; and interviews with students and staff, and the principal. A matched comparison student was selected for each Phoenix school student in the sample, to confound uncontrolled sources of variation; 10 Phoenix school students were included in the study. The findings, summarized in terms of program goals and objectives, showed that the program is effective in providing a drug free environment for students while they are in school. However, students' self-reports indicated that the program had no effect in reducing overall drug and alcohol use. The program did appear to be strengthening students' commitment to school and the rebuilding of good school habits. The counseling program was not found effective in decreasing drug use or in improving students' self-esteem. An individualized academic environment was found lacking, but learning habits had improved. While the partnership between school and home requires further investigation, indications are that more parent involvement is needed. (JAC)

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SUMMARY OF THE EVALUATION OF THE PHOENIX PILOT DRUG PROGRAM

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Foreword

During the 1980-81 school year, the Department of Educational Accountability contracted with the Pacific Institute for Research and Evaluation for an evaluation of the Phoenix School Pilot Drug Program. The purpose of this evaluation was to determine the degree to which the program is meeting its stated goals and objectives.

The report presented in this volume has as its basic conclusion that the Phoenix School Program is having mixed success in reaching its goals. Specifically, the researchers found that the Phoenix Program is 1) providing a drug free environment for students while they are in school; 2) may well be providing students with skills and a commitment to schooling that will help them to function more effectively in a regular school environment; but 3) is probably not reducing the students' overall drug usage, if weekends and evenings are considered.

Using our standard procedure, the report was shared with program staff prior to its finalization and public release. They raised some concerns regarding the interpretation of findings, especially with regard to the third conclusion--that the program is probably not reaching its goal of reducing students' drug and alcohol abuse. In order to better understand these concerns, the director of DEA and the director of the Division of Instructional Evaluation and Testing met with Phoenix staff and students and conducted two roundtable discussion sessions whose major goal was to reconcile some of the apparent discrepancies between the researchers' findings and the program director's views of the program. These discussions were useful to us, providing subjective data complementary to the empirical data collected as part of the study. The purpose of this foreward is to share this information.

First, it is important to say that nothing we have heard suggests that the evaluation was unsound in approach or inaccurate in its conclusions. The students we talked with (some of whom were in the study) agreed that the study participants were probably still drug users at the time of final data collection. Overall, then, we feel comfortable that the report presents a fair picture of the program during the 1980-81 school year, its accomplishements and its weaknesses.

Second, our conversations with students suggest that the program is helping them change their attitudes about drugs and drug use, does result in their reducing their drug usage or even being drug free for at least short periods of time, and may reduce their long-term usage.

However, it seems unlikely that many students will achieve the stated goal of the program: that they eliminate their drug use within the one year they are typically permitted to remain in the program. As they describe their progress, it seems to be a series of taking two steps forward and moving one step back. Despite the program's written goals, both the students and the staff view the process of becoming drug free as a slow and difficult one that will probably take many years.

This raises some important policy questions, given the fact that the Phoenix program is designed for the students to rejoin the regular high school community within a year. While the Phoenix Program appears to be providing students with many skills necessary for functioning effectively in the home school, it is clear that additional supports are needed by students when they return to their home school setting. The transition back to the home school environment may be very difficult for students whose rehabilitation is fragile, at best, and long established, maladaptive behaviors may reappear. Just as many self-contained special education programs have begun developing satellite or other transitional programs, Phoenix may also need to develop some transitional supports. The students with whom we spoke felt quite strongly about this point and expressed a good deal of concern about their return to their home schools in the absence of such services.

Finally, the Phoenix students report that drug abuse problems such as theirs are far from unique in their home schools. According to the students, the primary reason that more students are not identified are that 1) many teachers and administrators do not know how to recognize a student who is often "stoned" during the school day and 2) others ignore such problems so long as the students do not act out or bother others. No matter which junior or senior high they came from, they reported that they obtained their drugs on or near the school property, usually from other students who were using, as well as selling or sharing drugs, during the school day. In fact, several of the students volunteered that the desire to obtain drugs was a strong moviator in getting them to go to school many days.

The presence of such a peer dominated "freemarket" adds a great deal of credence to their assertions that only a tiny fraction of the MCPS students involved in heavy drug/alcohol abuse during the school day are receiving treatment for their problems.

If this information is indeed accurate, then still another question is why isn't a program such as Phoenix oversubscribed? It is not; in fact, it usually functions below its maximum capacity of 20 students. The answer to this is probably twofold:

1. Outreach services designed to identify and counsel habitual drug/alcohol abusers are probably insufficient/ineffective; and

2. Other models, such as in-school programs, may be needed to serve students for whom the concept of a segregated program such as Phoenix is not acceptable.

In any case, the data gathered in the roundtable discussions definitely points to the need for more aggressive identification and program recruiting procedures and for follow-up programs in the home schools/communities designed to take over where programs such as Phoenix leave off. There was no question in the DEA interviewers' minds that the Phoenix students were benefiting from the program. Now the challenge must be to:

1. Either redefine the goals of such programs in more realistic terms or widen their breadth so that they will serve students for more than a year;

2. Provide more aggressive identification and placement procedures;

3. Provide more programs - either using the Phoenix model or alternative ones - to meet the level of need which seems to exist; and

4. Provide support services for students whose problems are no longer acute but who have a long way to go before they can trust themselves to leave drug/alcohol abuse permanently behind.

Dr. Steven M. Frankel, Director
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Executive Summary

EVALUATION OF THE PHOENIX PILOT DRUG PROGRAM

This report provides a summary of the evaluation of the Phoenix Pilot Drug Program and presents the conclusions that are drawn from the results. The evaluation examines the degree to which the program is accomplishing its short term goals and objectives. Of central interest is the degree to which the program provides a drug/alcohol free environment which enables students to reduce their drug/alcohol usage. Also examined are the following:

- The adequacy of the counseling program
- The academic environment
- The relationship between parents and school

In interpreting the study findings, it should be noted that the resources allocated for this evaluation both in terms of time and money were quite limited; and, therefore, some aspects of the program were not well studied. Three important shortcomings in this regard were the following:

- The study was conducted over one school year; this timeframe did not permit either the assessment of behavioral change over a longer time period (students are normally not judged ready to leave the program until after a full calendar year of treatment) or a follow-through to determine how well the students in the sample function on return to their home school.
- Limited resources did not permit the evaluation staff to administer achievement instruments, and those administered by the program staff at the time of the posttest were sufficiently flawed as to be unusable.
- Limited resources did not permit the evaluation staff to give as much attention to the parent-school interface as we would have liked and as the objectives would have warranted.

In addition, common to many program evaluations of ongoing efforts, and nearly all drug evaluation studies, the evaluation was limited by:

- The small number of program participants eligible for inclusion in the evaluation.
- The need to rely on self-reports of drug/alcohol usage rather than more objective measures such as blood tests, urinalyses, etc., to determine the degree of substance abuse.

FINDINGS

This study was designed to answer the following question:

Is the Phoenix School Fulfilling Its Goal and Objectives?

The fundamental goal of the Phoenix program is to provide a drug/alcohol free educational environment for students involved with drugs/alcohol to reduce their drug/alcohol usage and to enable them subsequently to function effectively in the regular school program.

Summarized below are the findings of the study regarding the program goal and the three program objectives.

The Phoenix program goal has three parts; looking at each one-by-one, the answer to the basic question is yes, probably not, and maybe.

Yes--The program is effectively providing a drug-free school environment for students, many of whom were probably regular users of drugs while in school before coming to Phoenix. This is a valuable achievement which is fundamental to whatever gains these students make while at Phoenix. Hopefully, when they return to regular schools, they will carry with them the habit of being drug-free during the school day.

Probably Not--Despite the program's effectiveness in virtually eliminating drug usage during the school day, self-reports by students indicate that the program is having no effect in reducing overall drug and alcohol usage. Indeed, looking at the student data, it is hard to imagine a cluster of evaluation results which could demonstrate this finding more conclusively. However, all parents report that their children use drugs less than before they went to Phoenix. While this appears to be a contradiction, we feel that the weight of the data--the consistency of response from pre-to posttest, the lack of difference between treatment and comparison groups, and the supportive findings from other measures--all suggest that the picture painted by the student self-report is more accurate than that provided by this item from the parent survey.

The Phoenix School may well be too brief and superficial a program to impact such profound habits. It is probably correct in thinking that it does not belong in the treatment business, and its goal should be reformulated to reflect this; or the program should be profoundly redesigned so as to have the "weight" required to do effective treatment.

Maybe--The program appears to be strengthening the students' commitment to school and rebuilding good school habits, as demonstrated by all of the students in the sample. The only hesitancy preventing our labeling of this third aspect of the goal a success is our inability to observe the degree to which the improved commitment and habits demonstrated during a student's stay at Phoenix survive the transition back to a regular school.

THE OBJECTIVES

The first objective is to provide counseling for students. The program does provide counseling, but it does not seem to be achieving the explicit outcomes expected from counseling in two out of three respects, i.e., decreased drug and alcohol use and improved self-esteem (the Phoenix proposal, p. 14). Based on the observation of four group counseling sessions and the findings of two of the student measures, it appears that the counseling is suffering from a number of problems, not the least of which appears to be an ambiguity regarding the role of counseling at Phoenix. The program is, therefore, judged not to be doing particularly well in fulfilling the first of its three objectives.

The second objective is to provide an individualized academic environment. The program is not providing an individualized academic environment, and its resources and physical setting are not conducive to doing so. It does not appear to be achieving significant academic gains, at least not for the brighter students. This may not be the appropriate focus of the academic program. The program is doing very well in repairing learning habits, and this is probably what is needed most by the students. There is reason to believe that an academic program can probably not do well if it tries to focus equally on academic gains and on repairing learning habits. Given this problem, the choice of the program to focus on improving learning habits seems clearly to be the appropriate one for this group of students, so that overall the program may be more effective academically by not fulfilling this objective. The failure to fulfill the second objective may contribute to the program's ability to fulfill the third objective of the goal.

Unlike the counseling component, the program appears to have no ambiguity and to be very coherent with regard to its academic goals. This seems to be consistent with the principal's observation that the staff consists of teachers and not counselors. We would agree with that. The Phoenix School appears to be staffed with committed, outstanding teachers who are doing an excellent job in carrying out the school's academic program.

The third objective is to establish a partnership between the school and the home. We know least about how well the school is doing with regard to this objective. What we have observed suggests that this is a very difficult area and that the school has put a great deal of effort into it. However, it looks like it needs a great deal more experimentation to bring it off, if such a partnership can be built at all.

OTHER PROGRAM ELEMENTS

This section draws additional conclusions which are not explicitly related to the goal and objectives.

Phoenix success in bringing about a drug-free school and an outstanding attendance record reflects in large part a strong, well-planned, and carefully executed disciplinary program, which articulates well with the academic program. The students themselves praise the effectiveness of the discipline at Phoenix.

Students who enter the school with the most mature aspirations seem to take the best advantage of the academic and discipline program and to come out of Phoenix (to the extent that the posttest foreshadows the orientation of students leaving the program) with the best commitment towards school.

The referral process is slow and cumbersome for the most part and seems to ensure that Phoenix is to some degree underutilized in a context in which there are many students out there who could readily qualify for Phoenix's services.

CONCLUSIONS

Building on what the principal has said and on what we have observed, we would say that the administration and staff of the Phoenix School are a group of outstanding teachers doing what teachers do best, creating an appropriate and effective academic environment and instituting effective, creative, and firm disciplinary measures for children who need such measures. As a result of these efforts, the students are rebuilding their learning habits in a drug-free environment.

At the same time, goals and objectives which require more than what good teaching can provide appear not to be well achieved at the Phoenix School; and there is no evidence to suggest that more profound changes in personality are occurring, such as reduced drug and alcohol use, decreased delinquency, and improved self-esteem.

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The authors of this report wish to achnowledge their grateful appreciation for the many persons who made important contributions to it, and without whose help this study could not have been brought to this conclusion. At the same time, we take full responsibility for the ideas and conclusions expressed herein.

We wish to thank the principal, Mr. Brian Berthiaume, the staff, and students of the Phoenix School who put up with our presence and what must, at times, have been interference in their lives. No study of this intensity can help but be intrusive, and we have not received a fuller measure of cooperation in any previous setting.

We are specially grateful to the program students and the comparison group students who willingly, without compensation, submitted to the pre- and posttest battery of instruments and to their parents who gave their consent to the testing.

We are grateful to Dr. Joy Frechtling, director of the Division of Instructional Evaluation and Testing, and to Ms. Abby Shapiro and Ms. Ruth Lamothe of her staff. They were wonderfully cooperative in providing direction and feedback and in willingly and in a timely fashion fulfilling their responsibilities and beyond, providing the fullest possible support to the study. Much of the information in the outcome evaluation could not have been collected without their help.

We are specially grateful for the help of Dr. Ruth Newman, who spent much more time than we could possibly compensate her for, observing the counseling at Phoenix and helping us to understand her observations. She has continued to work with the Phoenix staff on a limited basis as an outcome of her involvement with this study.

We acknowledge our debt to Dr. Benjamin D. Wright of the University of Chicago, who oversaw the application of the Rasch model to the scaling of several data sets, and did so with conscientious care, even though we were unable to provide any compensation.

Finally, we acknowledge our debt to our colleagues at the Pacific Institute, especially Ms. Victoria Fortune who collected the pretest data and provided much support to the ongoing development and completion of this study. We are very grateful to our secretarial support, initially Ms. Leah Celzer, and during the last phases of the work, Ms. Mary Higgins, who helped with numerous tasks, including coding the data, keeping books, and typing forms and the final report.

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EVALUATION OF THE PHOENIX PILOT DRUG PROGRAM

A. Overview

This report provides a summary of the evaluation of the Phoenix Pilot Drug Program and presents the conclusions that are drawn from the results. The evaluation examines the degree to which the program is accomplishing its short-term goals and objectives. Of central interest is the degree to which the program provides a drug/alcohol free environment which enables students to reduce their drug/alcohol usage. Also examined are the following:

- The adequacy of the counseling program
- The academic environment
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In interpreting the study findings, it should be noted that the resources allocated for this evaluation both in terms of time and money were quite limited; and, therefore, some aspects of the program were not well studied. Three important shortcomings in this regard were the following:

- The study was conducted over one school year; this timeframe did not permit either the assessment of behavioral change over a longer time period (students are normally not judged ready to leave the program until after a full calendar year of treatment) or a follow-through to determine how well the students in the sample function on return to their home school.
- Limited resources did not permit the evaluation staff to administer achievement instruments, and those administered by the program staff at the time of the posttest were sufficiently flawed as to be unusable (see Section I.C.2.b., below).
- Limited resources did not permit the evaluation staff to give as much attention to the parent-school interface as we would have liked and as the objectives would have warranted.

The review is organized as follows:

Section B. presents a summary of the methods used in the process and outcome evaluations.

Section C. presents the results organized in three subsections:

1. The results as they relate to the goal of the Phoenix School
2. The results as they relate to the three objectives of the Phoenix School
3. Additional results, which are of interest but do not relate explicitly to the goal or the three objectives

Section D. presents the conclusions.

A Final Cautionary Note: Some of the findings of the outcome evaluation, of necessity, are based on a detailed statistical analysis, involving a number of findings. The summary character of this document does not permit that level of detail to be presented here. The reader who has questions about what may lie behind a result which is only briefly presented in this report is encouraged to examine the development of the result in the main body of the report.

B. The Evaluation Methodology

The discussion of the evaluation methodology is divided into two parts, reflecting the two principal substudies which comprise this evaluation--process and outcome evaluation. Process evaluation is descriptive in character and attempts to represent what takes place in the Phoenix school and how the staff, students, and others relate to the program. The outcome evaluation attempts to measure short-run changes in Phoenix School students and assess whether or not these changes are attributable to the program.

1. Process Evaluation Methodology

Process evaluation data were collected primarily through observation and interviews.

To study referrals, two counselors at a referring high school, two students, a pupil placement worker, and the principal of the Phoenix School were interviewed.

To study the academic program, a social studies and an English class were observed for the older students, and a social studies and English class were observed for the younger students. The staff members involved in these four classes were interviewed. The course materials and objectives were reviewed. Using "pretest" MAT (Metropolitan Achievement Test) math scores, five students from our sample (see Section I.B.2.a., below) were selected (the two highest math scores, the two lowest, and one in the middle) and interviewed regarding the academic program. One drug education class was observed, and the drug education logs of two students were reviewed.

To study the approach to student discipline, information was collected from interviews with the principal, staff, and students. School records were reviewed.

To study counseling, four group sessions were observed, and the principal, staff, and students were interviewed.

All staff and all students in the sample who completed the school year were interviewed during the process evaluation.

2. Outcome Evaluation Methodology

a. The Sample and the Design

The outcome evaluation employed a quasi-experimental design in which a matched comparison group student was selected for each Phoenix School student in the sample. The matching was done by a technique which has proven very effective in biomedical research; namely, each Phoenix School student was asked to identify two same-sex, similar-age friends who were not students at the Phoenix School. One friend for each Phoenix School student was selected for study participation. Parental and student consent was obtained for all students in the outcome evaluation. Once the comparison group was constituted, it was treated as a control group, the analysis being made on the basis of the two groups, each considered as a whole, rather than on the basis of the matched pairs. This technique of matching attempts to confound uncontrolled sources of variation in the same manner as random assignment. The evaluators would have preferred to employ random assignment, but the limited number of students who are admitted to Phoenix School precluded it.

Our mandate was to include students in the Phoenix sample who had not been in the school during the previous year (ending June, 1980). While twenty-one students entered the program during the period from July 1, 1980, through June 30, 1981, only ten students remained in the Phoenix School long enough to qualify for the study.[1]

Because of the possibility that a student who was admitted to Phoenix would leave during the first month, pretesting was not done until the student was in the program for at least a month. For one student who entered the program in July, 1980, the period of time to the pretest was much longer. All the rest of the students were tested within approximately one to two months of entering Phoenix. The last student included in the sample entered in late January of 1981.

Students were posttested in the middle of May, 1981. No student had spent the full twelve months in the program at this time, but the timeframe of the study did not allow for a pretest/posttest span of twelve months. Most of the students entered Phoenix in September and October and were in the program seven to eight months before they were posttested. The one student who entered in July was in the program for ten months, and the one student who entered in January was in the program just one week less than four months at the time of the posttest, so that students did vary with regard to how much exposure to the program they had had at the time of the posttest. Of the ten who completed the school year, seven had experienced at least seven months of Phoenix by the time of the posttest.[2]

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[1]During the time period of the study, Phoenix School served a total of 40 students; the 21 students admitted after July 1, 1980, and 19 students admitted earlier.

[2]The reader should note that the circumstances surrounding the sample and its exposure to the program are fairly common in the evaluation of special education programs, and one can seldom find circumstances for the outcome evaluation of small programs which are significantly more orderly.

Fortunately, although we employed a quasiexperiment, the match between the Phoenix and comparison groups (as illustrated in Table One, see Section I.C.1.a) was excellent; and all the results suggest that this quasiexperiment was a good approximation of a true experiment, and the reader therefore can have considerable confidence in the comparisons between the two groups presented in Section I.C., below.

b. The Variables

From the perspective of the outcome evaluation, the data was sorted into four categories:

- o Background variables
- o Program variables
- o Intermediate outcome variables
- o Final outcome variables

Most of the data for background, intermediate, and final outcome variables comes from the instruments which were administered to the students (included in Appendix C of the full report). Data for the program variables were collected from staff logs of how students in the sample spent their time and from program records. Other sources of data included parent and student interviews (conducted in May, 1981) and home school and Phoenix School records.

Background Variables provide background data on both Phoenix and comparison group students, including sex, race, socioeconomic status (SES), and pretest data on attitudes towards school, attitudes towards the future, use of leisure time, self-esteem, attendance, grade-point average (GPA), and self-reported data on drug abuse and deliquency. For Phoenix students only, we have reading, math, and language scores on the MAT, administered at the time of admission to the program. Much of the background data was collected during the pretest.

Background data make it possible to compare the Phoenix and the comparison group students at the time of the pretest and also to make pre-/posttest comparisons for each group. Background data provide possible alternative explanations of observed outcomes or suggest factors which may have contributed to the observed outcomes.

Program Variables apply only to Phoenix students and represent an attempt to measure the intensity and character of the program as experienced by each of the students in the program group. Four of the program variables reflect hours spent in various kinds of Phoenix School activities, e.g., academic classes, drug education, group counseling, and individual counseling. This data is based on meticulous records kept by the Phoenix staff on the students in the sample. In addition, we utilized Phoenix records to capture data on parent contacts per-student and time spent on the various levels of the level system for promoting discipline (see Section I.C.3.e. for more discussion of the level system).

Intermediate Outcome Variables are those outcome variables which are not as closely related to the goal and objectives of the Phoenix School as the final outcome variables. These variables included data on use of leisure time, aspirations for the future, attitudes towards school, and parent and student ratings of the four main components of the Phoenix School. This data was collected mostly from the posttest instruments and from parent and student interview schedules.

Final Outcome Variables are those outcome variables which are more closely related to the goal and objectives of the Phoenix School. Included here are two variables from school records (GPA and attendance data for the school year 1980-1981), posttest data on the prevalence of drug abuse and deliquency, and posttest self-esteem data.

c. The Instruments

Five instruments were administered to Phoenix and comparison group students for both the pre- and posttests.

(1) Assessment of Drug Abuse Among Youth

This instrument was adapted with slight modifications from an instrument that had been developed by the New York State Division of Substance Abuse Services. It has been used successfully by them for a number of large-scale surveys of drug abuse incidence and prevalence among secondary school students.

(2) Unreported Deliquency Instrument

This instrument was adapted from the work of Martin Gold and collects data on the prevalence in the past 30 days of a wide range of behaviors, including minimally negative behavior such as not obeying one's parents, status offenses such as running away, misdemeanors such as petty theft, and felonies such as arson and felonious assault.

(3) Drug Attitude Scales

This instrument was developed by the senior evaluator to explore the meaning of drugs to the Phoenix and comparison group population as contrasted with several other groups who used significantly less drugs. Since it does not report on individual drug attitudes, it does not contribute directly to the major issues addressed by this evaluation. The results of this instrument are therefore not reported here.

(4) Self-assessment Scales

The following description of this instrument, designed to measure self-esteem in seven scales, is taken from the Drug Abuse Instrument Handbook:

The instrument differentiates four processes used to derive self-esteem. The processes are Basic Acceptance, Conditional Acceptance, Real-Ideal Congruence, and Self-evaluation. The Basic Acceptance dimension deals with a nonverbal sense of one's acceptability and is measured through Showing Feeling, a measure of ease in expression of affection and experience of personal closeness. Conditional Acceptance deals with judgments of worth dependent upon the fulfillment of standards for approval; three components are Social Sources of Approval, Performance Sources of Approval, and Experienced Ease in Being Known by Others. Real-Ideal Congruence is a measure of the correspondence between what one thinks one is and what one thinks one should be. Self-rating (evaluation) is the estimate of how one compares with other persons.

(5) General Information and Background Instrument

This instrument is designed to collect background and outcome variables. With regard to outcome variables, it collects information on students' attitudes towards the future, attitudes towards school, and use of leisure time. With regard to background variables, it collects information on socioeconomic status, position in sibling order, and number of friends at Phoenix School (or home school for comparison group students).

d. The Collection of Outcome Evaluation Data

Most of the pretest data was collected in October and November for students who entered the program in September and October, respectively.

Testing was done in two parts. Two instruments were administered orally by a member of the evaluation staff in a one-to-one structured interview--the Unreported Deliquency Instrument and the General Information and Background Instrument. The remaining three instruments were filled out in written form by the students, usually in groups, and the tests were administered by a staff person from the MCPS Division of Instructional Evaluation and Testing.

The Division of Instructional Evaluation and Testing designed the forms for the collection of school participation data and for the parent and student interviews (conducted at the time of the posttest) and administered the parent and student interviews. The Division of Instructional Evaluation and Testing also collected the GPA and attendance data from the students' records. Data on student participation in the Phoenix School was supplied by the staff. Data was also obtained from the Phoenix School records by a member of the evaluation staff.

e. The Analysis of Outcome Data

The analysis was organized into two main areas, i.e., the development of scales and the performance of statistical test.

(1) The Development of Scales

Instruments, such as those employed in the outcome evaluation, contain a large number of data items, which often contain related information and would present an extraordinarily difficult task if each item were to be considered separately. The Self-assessment Scales instrument was already organized into seven scales. Scales, however, had to be developed for the remaining four instruments.

For the drug use instrument and for two dimensions of the background instrument (attitudes towards the future and use of leisure time), scales were developed using the Rasch model, which is the most powerful strategy available for the development of psychometric scales. The three Rasch scales all performed well in the context of the analysis, suggesting that latent traits were developed that reflected:

- Seriousness of prevalence of drug abuse during the past 30 days
- Maturity of aspirations for the future
- The creative use of leisure time

For delinquency, a more primitive scale (lack of resources did not permit a fourth use of the Rasch model) was developed in which three levels of weights were assigned in terms of a plausible, but arbitrary, classification of the items. The resulting scale did not perform as well in the analysis as the Rasch scales, which is as expected.

Multidimensional scaling was employed for the drug attitude instrument which provided a rather clear picture of how students in the study thought about drugs, as contrasted with nondrug users.

(2) Statistical Tests

Although the sample size is small, we employed statistical tests which are robust for small sample sizes; and we avoided placing much weight on isolated results, but rather focused our interpretation on families of coherently related results, as shown in Tables 1 through 9 in Section I.C. Because of this approach, we feel that one can have considerable confidence in the results.

All results are analyzed in terms of a threshold of .05 for determining the statistical significance (type one error). In addition, when the probability of a result fell between .05 and .10 it is pointed out as "borderline."

The following are the four categories of analytic needs and the statistical test associated with each:

- Comparisons of the program and comparison groups (including pre/post-test comparisons) using interval or intervallike data--the Mann-Whitney U statistic[3]

- Comparisons of the program and the comparison groups (including pre/post-test comparisons) using ordinal or nominal data--Fisher's Exact Test

- Exploring relations among variables within the comparison or within the program group using ordinal or nominal data--Fisher's Exact Test

- Exploring relations among variables within the comparison or within the program group using interval or intervallike data, i.e., Spearman's rank-order correlation

C. Results

The following results focus on the Phoenix School students. Results relating to the comparison group are only mentioned to the extent that they help clarify the qualities of the Phoenix group.

1. The Goal of the Phoenix School

The fundamental goal of the program is to provide a drug/alcohol free educational environment for students involved with drugs/alcohol to reduce their drug/alcohol usage and to enable them subsequently to function effectively in the regular school program. (The Phoenix Proposal, page 1)

a. "To Provide a Drug/Alcohol Free Educational Environment..."

Our instruments did not permit a direct, objective assessment of this goal. We know of no instrument which reliably collects data on drug use prevalence during a portion of a day, and the resources did not permit the laborious task of creating and pilot testing a new instrument.

The survey of parents (May, 1981) sheds some light on this goal. All Phoenix parents reported that their children do not use drugs in school. This is supported by informal indications gathered from interviews with students and staff and from the observation of the evaluators. Everything seems to suggest, that with rare exceptions, the Phoenix School is drugfree.

We have no data on whether the comparison group is also drugfree or not during the school day. Informal discussions with some Phoenix and comparison group students indicate that among their friends drug taking is fairly common during the school day at the secondary schools from which these students come. It seems likely, then, that those comparison group students who have a high prevalence of drug abuse probably take drugs during the school day at times.

---

[3]Examples of the types of data are as follows: interval or intervallike--GPA, percentage of days attended, and drug prevalence score; ordinal--grade level, attitudes towards school, and age (treated as a category); and nominal--sex, race, and MCPS home school administrative area.

Informal and subjective data from several sources all suggest that the Phoenix is achieving the first part of its goal.

b. "To Reduce Their Drug/Alcohol Usage"

Before presenting our results with respect to this goal, it would be well to briefly describe the Rasch model of recent drug use prevalence on which the findings are based.

For each subject, a single number or drug prevalence index was developed. This index accurately summarizes the majority of information contained in a number of separate items which ask about how many times one has taken a substance in the past 30 days. The substances covered by this instrument are beer, wine, liquor, marijuana, hashish, angel dust, downers, uppers, tranquilizers, cocaine, LSD and other hallucinogens, heroin, methadone, glue, cough medicine, and other narcotics such as opium, morphine, codeine, and Demerol. None of the students reported using methadone, cough medicine, heroin, or glue during the 30 days prior to the pre- or posttests. The index is essentially an accurate summary (on a student-by-student basis) of all of the prevalent information in Figure 1.

Figure 1 tells the whole story. One has to make allowances for the attrition in the samples; namely, for the fact that for the posttest data, there are only 10 Phoenix students vs. 11 for the pretest; and only 9 comparison group students for the post-test vs. 11 for the pretest. Since the three missing students were all fairly heavy drug abusers, their absence in the posttest data is bound to make the posttest graphs look a little better than the pretest data; and one should make allowances for this as one looks at the following comparisons.

Figure 1 graphically illustrates that there is no difference between the Phoenix and the comparison groups for each of the 12 substances for which there is any recent prevalence, and there is no difference between pre- and posttest scores for these substances for either the Phoenix or the comparison group.

If one thinks of the adjacent pairs of bar graphs (pretest/posttest) of Figure 1 as a "picture of hills by a lake," then the degree to which the "hills" on the upper half of the figure look like their "reflection in the lake" below is the degree to which the pre- and posttest scores are similar for a particular substance. Similarly, the degree to which a "picture" at the top half of the page looks like a "picture" directly below, it is the degree to which there is no difference between the Phoenix students and the comparison students. Comparing the upper halves ("the hills") is a comparison of the pretest scores of the two groups. Comparing the bottom halves ("the reflections") is a comparison of the posttest scores of the two groups. The overall impression , for the given substances, is that there are no differences; that is:

Figure One
Frequencies of Drug, Alcohol Usage During the Thirty Days Preceding Testing

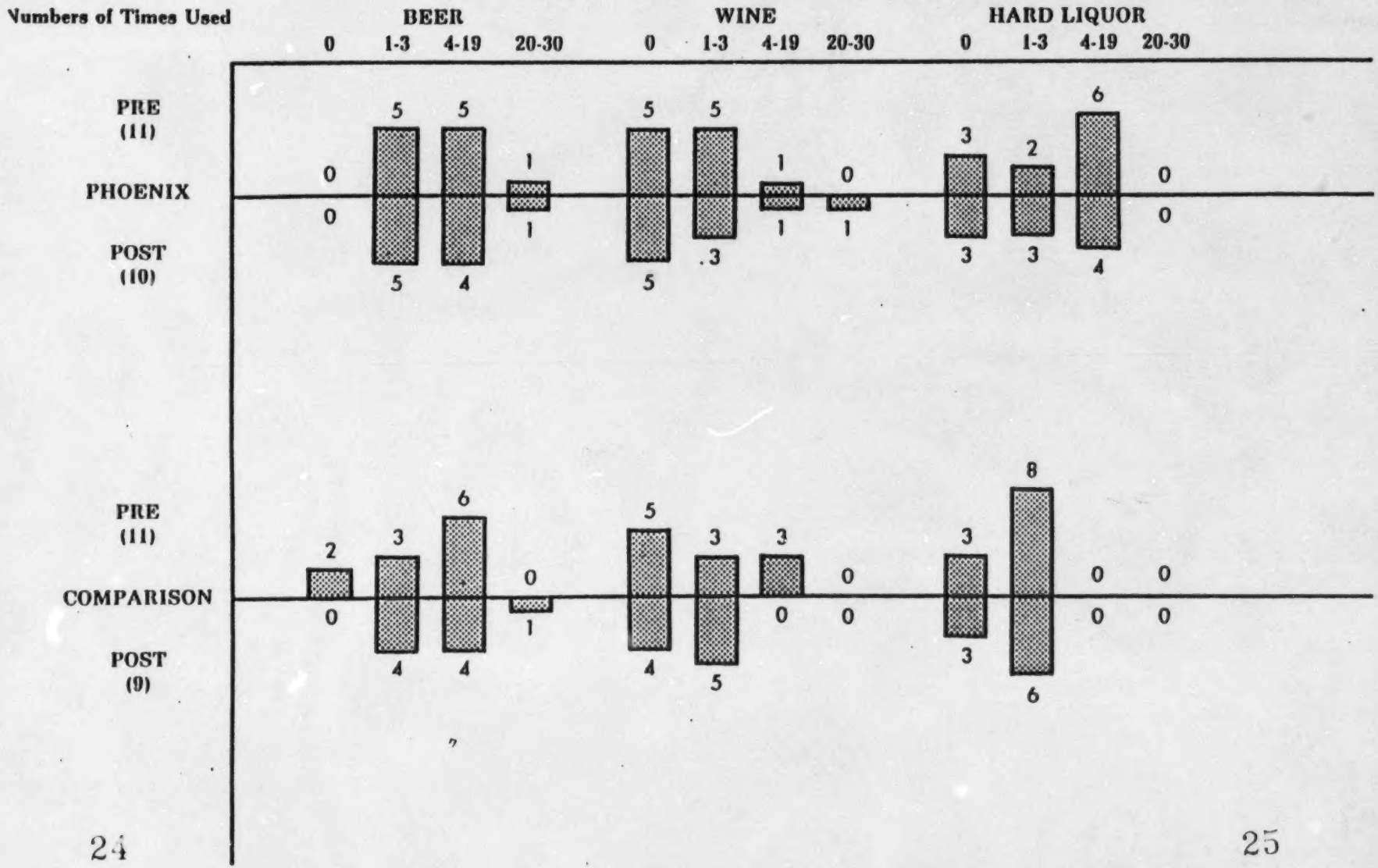


Figure One (continued)
Frequencies of Drug, Alcohol Usage During the Thirty Days Preceding Testing

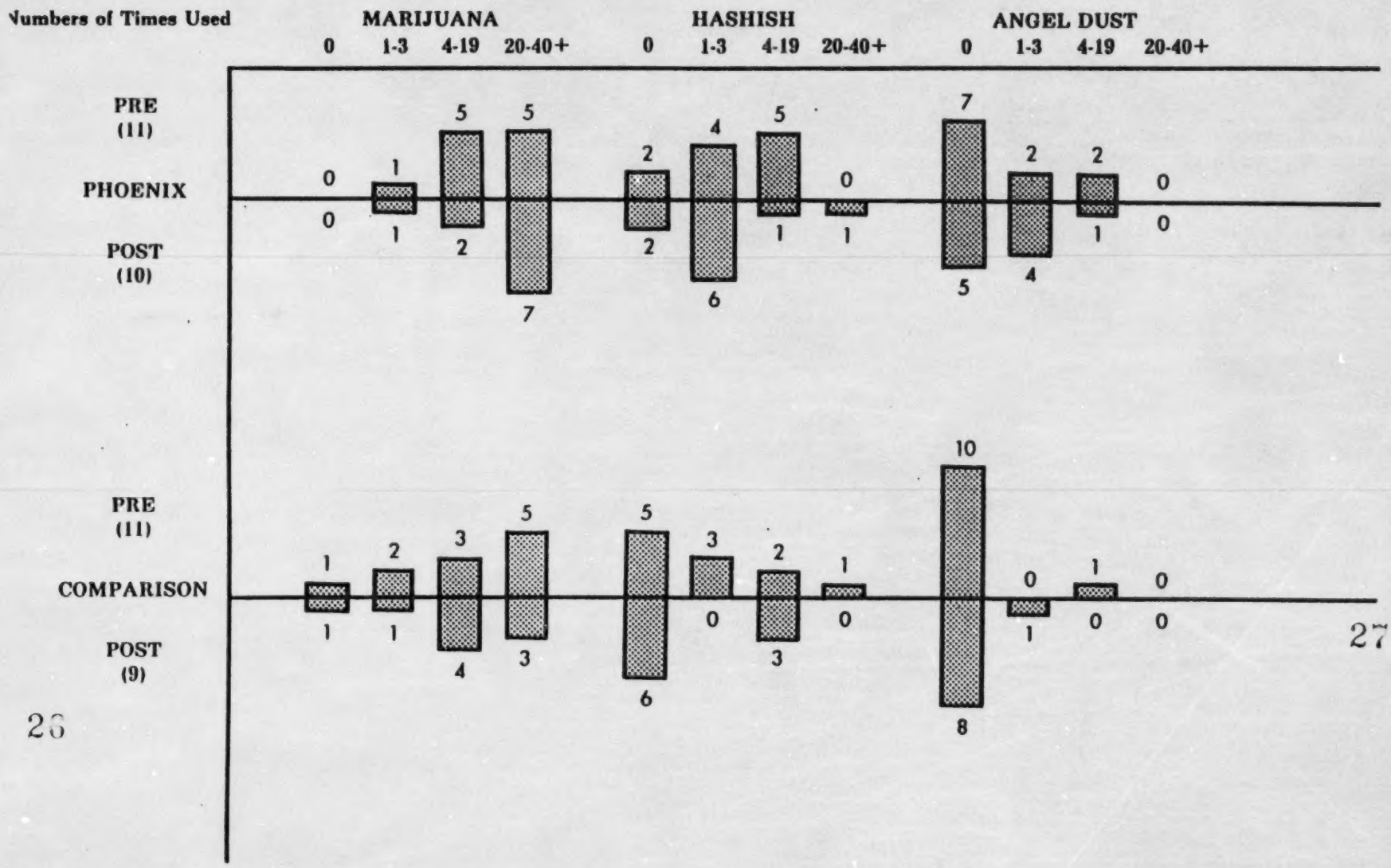


Figure One (continued)
Frequencies of Drug, Alcohol Usage During the Thirty Days Preceding Testing

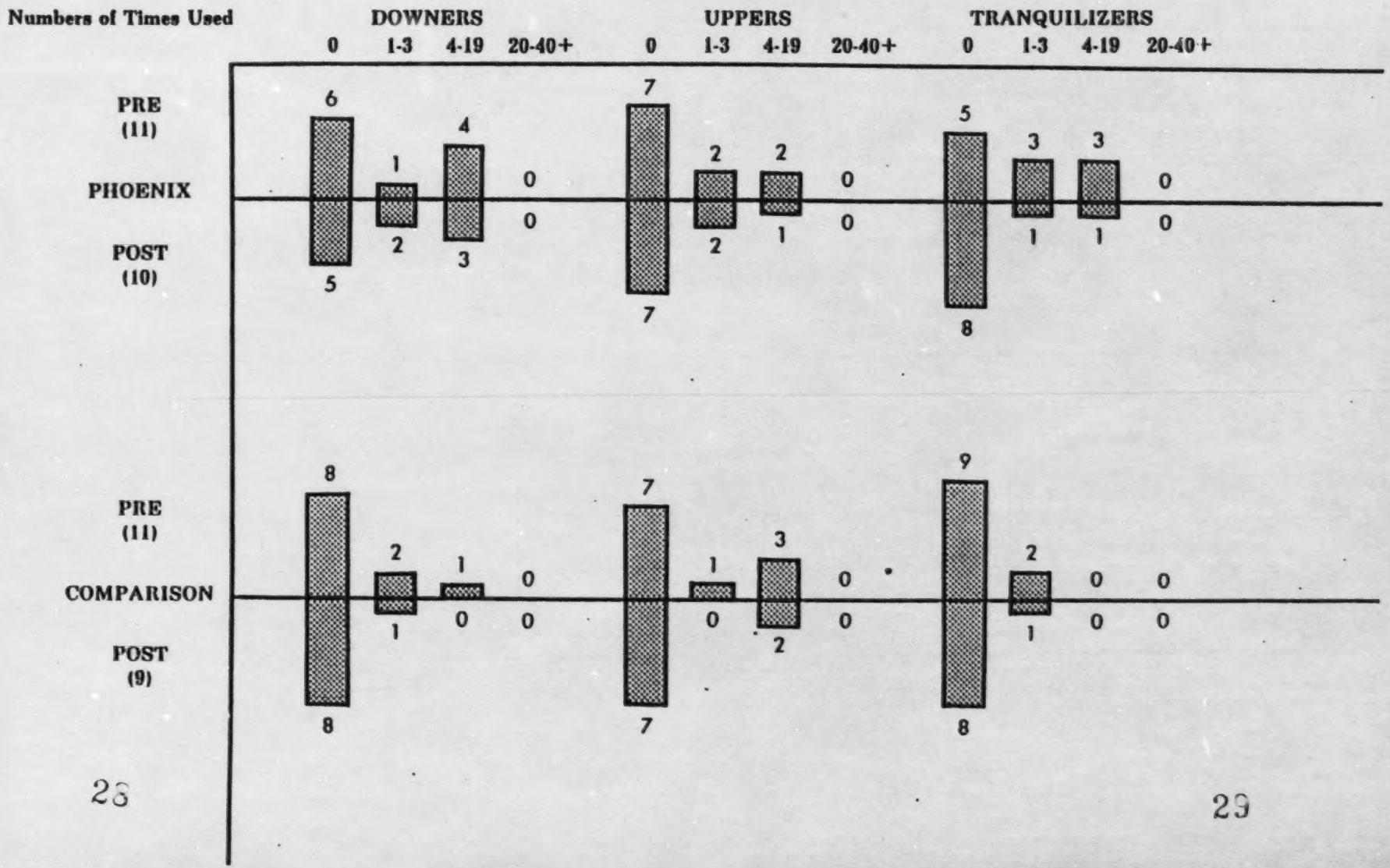
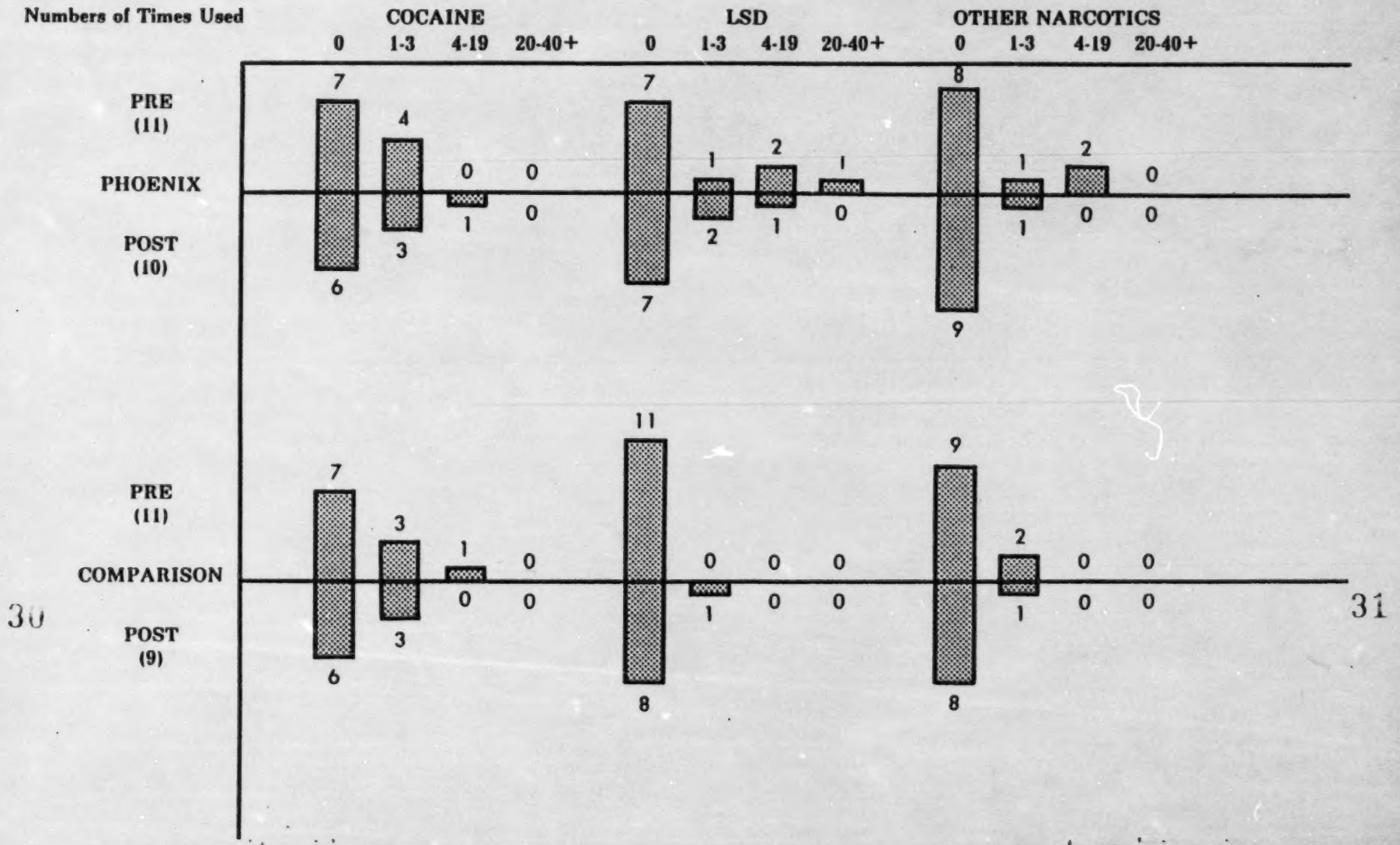


Figure One (continued)
Frequencies of Drug, Alcohol Usage During the Thirty Days Preceding Testing



- For the Phoenix students, the pre- and posttest drug abuse prevalence is essentially the same.

- For the comparison students, the pre- and posttest drug abuse prevalence is essentially the same.

- For the pretest scores, there is no difference between the Phoenix group and the comparison group.

- For the posttest scores, there is no difference between the Phoenix group and the comparison group.

- For both groups, the impression is that the drug use patterns are not trivial; i.e., we find some very frequent use of what are generally regarded to be serious substances.

Tables 1 through 4 spell out in greater detail the fact that the four comparisons cited above are not significant. In outcome evaluation, it is hard to imagine a more compelling picture of "no effect." This very coherent set of results is further butressed by the fact (see Tables 1 and 4) that there is "no effect" for deliquency as well. The model of drug abuse proposed by the Jessors, which is the most coherent model of the onset and prevalence of drug use of which the authors are aware, suggests that these two variables should vary together. It would have been a violation of their model had delinquency improved for the Phoenix students, but drug abuse stayed the same. Their model also predicts the observed stability with regard to their aspriations towards the future.

TABLE 1

COMPARISON OF PHOENIX AND COMPARISON GROUP STUDENTS

	Variable	Direction	Phoenix Mean	Comparison Mean	Significant*
Drug Abuse	Pre	-	+0.57	+1.58	No
	Post	-	+0.88	+2.35	No
	Diff.	-	+0.35	+0.54	No
Self-Reported Delinquency	Pre	-	+84.91	+53.55	No
	Post	-	+80.73	+43.22	No
	Diff.	-	+ 4.18	-2.67	No
GPA	Pre	C>P	+0.97	+1.47	Border
	Post	P>C	+2.95	+1.14	Yes
	Diff.	P>C	+1.98	-0.40	Yes
Attendance	Pre	-	+78.18	+86.00	No
	Post	P>C	+92.40	+73.36	Yes
	Diff.	P>C	+11.30	-7.27	Yes
Aspirations	Pre	-	+0.59	+0.57	No
	Post	-	+0.43	+0.65	No
	Diff.	-	-0.17	-0.05	No
Activities	Pre	-	+0.04	-0.21	No
	Post	-	+0.11	+0.14	No
	Diff.	-	+ .20	+ .39	No
SAS - All Pre and Post were tried. The three following were significant:					
Social Sources	Pre	C>P	+42.27	+58.82	Yes
	Post	C>P	+45.45	+58.89	Yes
Performance Sources	Pre	C>P	+25.82	+33.55	Yes

*(Mann-Whitney U's, $P < .05$, two tail tests)

TABLE 2

USE OF DRUGS IN LAST 30 DAYS

Drugs Used in Last 30 Days

	Students Answering Yes on Pre-Test		Students Answering Yes on Post-Test	
	Phoenix (N=11)	Comparison (N=11)	Phoenix (N=10)	Comparison (N=9)
BEER	11	9	10	9
WINE	6	6	5	5
HARD LIQUOR	8	8	7	6
MARIJUANA	11	10	10	8
HASHISH	9	6	8	3
ANGEL DUST	4	1	5	1
DOWNS	5	3	5	1
UPS	4	4	3	2
TRANQUILIZERS	6	2	2	1
COCAINE	4	4	4	3
LSD	4	0	3	1
OTHER NARCOTICS	3	2	1	1

TABLE 3

HISTORY OF DRUG USE
(Life-time Prevalence at time of Post-Test)

Have You Ever Used:	Yes Answers	
	Phoenix (N = 10)	Control (N = 9)
WINE, BEER, LIQUOR	10	9
MARIJUANA	10	9
HASHISH	9	8
ANGEL DUST	10	5
DOWNS	10	6
UPS	10	8
TRANQUILIZERS	9	4
COCAINE	10	5
LSD	10	5
OTHER NARCOTICS	6	5
GLUE	1	3
HEROIN	1	0
METHADONE	1	0

TABLE 4

PRE-TEST/POST-TEST COMPARISONS

Variable	Group	Direction	Pretest Mean	Posttest Mean	Significant*
Drug Abuse	Phoenix	--	+0.57	+0.88	No
	Comparison	--	+1.58	+2.35	No
Delinquent Behavior	Phoenix	--	+84.91	+80.73	No
	Comparison	--	+53.55	+43.22	No
GPA	Phoenix	Post > Pre	+0.97	+2.95	Yes
	Comparison	--	+1.47	+1.14	No
Attendance	Phoenix	Post > Pre	+78.18	+92.40	Yes
	Comparison	Pre > Post	+86.00	+73.36	Border

*(Mann-Whitney U's, $P < .05$, two tail tests)

Persons associated with the program raised several issues which they believed would "conceal" a positive effect of the Phoenix School on drug abuse prevalence. Of course, there may be a positive effect of the Phoenix School program, and there may be some factor which is confounding the data and concealing this effect; but we can demonstrate that the three suggested "confounding effects" that would conceal a positive result are not likely to be operating in this data set.

First, it was suggested that the Phoenix students were likely to become more open and frank about their drug use the longer they stayed in the program so that the pretest data would be biased to look better than it really is; and the posttest data is, therefore, an improvement, disguised by this bias on the pretest. Our response to this contention is that the picture is one of very heavy drug abuse for many of the Phoenix students on the pretest, as reflected in Figure 1. It is hard to imagine that the picture is actually much worse than we see in Figure 1.

Second, Dr. Ruth Newman, a noted clinical psychologist who was consultant both to the evaluation and to the Phoenix School, observed that youth who know that they are about to leave a treatment program tend in the last month to evidence a renewed outbreak of the symptoms that initially led to their being treated. It was suggested, by analogy, that those students who expected to leave Phoenix at the end of the school year would have a resurgence of drug abuse, pushing up the posttest scores.

We obtained information regarding which students, at the time the posttest was administered, were expected to leave the program at the end of the school year.

We ran a Fisher's Exact Test to assess whether these students showed higher posttest prevalence scores or less favorable pretest/posttest difference scores. The patterns showed no directionality, and the probabilities were not significant (or borderline). The data very clearly do not support this hypothesis.

It was also suggested that there are important seasonal effects and that drug abuse rises in the spring. One source suggested that May was a peak month; another suggested that the period of March through May was a peak season. (These were nonsystematic observations on the part of persons who have contact with many drug-using students.) We are able to control for the possibility by the fact that the comparison group received their posttests during exactly the same part of May as the Phoenix group. If the season were causing an articifical rise in Phoenix group prevalence, this would not conceal any positive effect of the program on the students because the comparison group would be experiencing the same seasonal effect. Thus, if the Phoenix program were making a difference, this difference would be demonstrated by the fact that the Phoenix drug abuse prevalence scores were less than the comparison group scores. This was not the case.

Finally, the use of self-report as a technique for data collection has been questioned in this case becasue of the sensitive nature of the data and the type of individuals providing the information. This procedure has been used effectively in similar studies for more than a decade, and the proponderence of evidence suggests that it is valid and reliable. Further, we see no alternative other than medical tests such as blood tests or urinanalyses which also have limits and are clearly precluded. Further, self-reported data is usually considered suspect when a positive change in behavior is found. In the present case, with the data indicating no change, one would have to presume that the students were deliberately misreporting their drug usage to make the program look bad. We think this is unlikely.

It is difficult to prove "no effect." Still, it is hard to imagine a collection of results which could more clearly demonstrate that the Phoenix program is failing to achieve the second part of its three-part goal. We feel quite confident, given what we know, in asserting that the Phoenix program is probably having no impact on the overall level of drug abuse of its students when measured on a short-run basis.[4]

The self-reported data on drug abuse, delinquency, and aspirations all paint a coherent picture for both groups in terms of the Jessor model and suggest little change in overall drug usage. There is, however, data which comes from the parents of the Phoenix students, which seems to point in a different direction:

- All Phoenix School parents report that their children do use drugs outside of school.
- All Phoenix school parents report that their children use drugs less than before they went to the Phoenix School.

If we note that all of the Phoenix students were tested after they had been one month in the program (in three instances the interval was longer), it is possible that there is no contradiction and that the levels of prevalence were noticeably higher, on the average, prior to entering Phoenix. However, the pretest levels of usage are so high for some of the students that it is difficult to conceive of this possibility, and the reason for this apparent discrepancy cannot be firmly established.

Another kind of finding which lends further weight to the cluster of "no effect" findings already discussed are the pretest/posttest correlations for each of the groups. If there are high positive correlations, then this tells us that the same students who were doing worse or better on pretests continued to be in the same position on the posttests. If nothing is happening, one would be hard pressed to explain why students were changing

[4]The timeframe of the evaluation would not permit this goal to be explored over any greater interval of time. If there is an effect which shows up when a student has completed a full twelve months of the program (which none of the students in the sample had at the time of the posttest) or after a student has been out of the program for a while, we have no evidence one way or the other about it.

their positions with respect to each other. High positive correlations, therefore, further buttress the notion that there is "no effect." Using the Jessor framework, we would expect high positive correlations with respect to drug abuse, delinquency, and aspirations for both the Phoenix and comparison groups, with drug abuse being the most important. The picture revealed by the data is in almost perfect agreement with there being "no effect"; five of the six predicted correlations are in fact positive and significant. The only one that failed to confirm the prediction is the correlation for delinquency for the comparison group. Since, as observed above (Section I.B.2.e (1)), the delinquency scale is the most primitive and least reliable of the three, a failure with respect to this variable only for the comparison group, is the least important of the six correlations; so essentially the finding of "no effect" is fully supported by the correlational findings as well.

Table 5 presents a different kind of result with respect to drug abuse. The interpretation of this table is as follows:

- The positive correlation of group counseling hours and academic hours reflects in part the fact that the student is present in the program, most academic activities and group counseling sessions being regularly scheduled.

- The negative correlation of difference in drug abuse with pretest drug abuse reflects the fact that those persons who started out with the greatest prevalence scores made the greatest improvement; on the other hand, students whose drug abuse got noticeably worse started out with somewhat better than average prevalence scores. In other words, those who were the worst on the pretest made the greatest gains, and those who were better than average on the pretest ment "downhill." Note that these changes in drug abuse from pretest to posttest were not great enough to disturb the overall ordering of the students from pre- to posttest. The students who were the worst on the pretest were generally still the worst on the posttest, and the best generally stayed the best.

- Finally, and most importantly, the two strongest negative correlations--difference in drug abuse with group counseling hours and difference in drug abuse with academic hours--suggest that the staff were aware of those students whose prevalence of drug abuse was changing for the worse; and they tried to help with extra counseling sessions and with extra academic attention. Apparently this extra help did not do these students enough good to change their overall downward trend.

TABLE 5

VARIABLE CLUSTER CENTERING ON DRUG ABUSE
(CORRELATION MATRIX) -- PHOENIX SAMPLE

		Drug Abuse		Group Counsel Hours	Academic Hours
		Pre	Difference		
Drug Abuse	Pre	--	--	--	--
	Difference	-.61*	--	--	--
Group Counseling Hours		+.69*	-.89**	--	--
Academic Hours		+.53	-.88**	+.76**	--

*.10 > .P > .05, correlation borderline
**Significant at the P < .05 level

c. "To Enable Them Subsequently To Function Effectively in the Regular School Program"

Since the limited timeframe of the evaluation required us to collect data only during the time while Phoenix students were enrolled in the Phoenix program, we were unable to obtain any direct evidence in support of this goal; however, there is a great deal of indirect evidence which suggests that this may be a second aspect of the three-part goal in which the Phoenix School is functioning well.

The process evaluation of the academic program sheds light here: the emphasis of the academic program seems not to be on reaching new heights of academic content but rather on training chronic truants how to organize their time, how to organize their work, how to continue work at a consistent pace, and how to utilize their teachers as helpful resources. It attempts to instill in them the habit of studying daily; there are daily homework assignments, routine tests, and frequent reports.

The two variables which speak to the ability of the program to develop greater commitment towards school while at Phoenix are GPA and attendance. Of these two, attendance may be the most meaningful, since GPA is in part a reflection of grading patterns inherent in a school and is not a relible indicator across schools. The "pretest" GPA and attendance scores reflect the second semester of the prior school year (1979-1980) as taken from the school records. For the Phoenix students, the "pretest" scores on these two variables reflect the home school and not the Phoenix School. The "posttest" scores reflect the second semester of the 1980-1981 school year, which was, for the most part, spent at Phoenix for the ten subjects in our sample who completed the school year.

Table 1 tells us that the two groups--Phoenix and comparison--started out with no difference with respect to attendance; and with a borderline difference with respect to GPA, with the comparison group having a slightly higher average GPA than the Phoenix group (D+ vs. D). With respect to the difference in posttest scores on both of these variables, the Phoenix students improved on the average, whereas the comparison group students went downhill on the average; and the difference between these two groups in terms of the change in these two variables is significant. At the time of the posttest, the Phoenix students were significantly better than the comparison group students on both measures.

Table 4 tells us the Phoenix students' posttest scores are significantly greater than their pretest scores on both of these variables--GPA and attendance. For the comparison group, however, there is no change with respect to GPA; and there is a borderline relationship suggesting that their attendance is getting worse.

These are the principal findings, and they suggest that a decided impact of the Phoenix program is to improve attendance. The change in GPA may reflect an improvement, or it may reflect a different approach to grading, one which

may be designed to provide positive reinforcement for the effort which the students are making. This latter possibility would be very appropriate for a program whose focus is trying to repair study habits that had become very weak due to frequent drug use in school, rather than trying to bring about noteworthy academic growth. The change in GPA, however, is quite large for the Phoenix students, from a D average to a B average, so that it could reflect real gains as well.

Tables 6, 7, and 8 tell us a little more about what is happening within the Phoenix group:

- The strong positive pre/post correlation for attendance suggests that those who started out with the best attendance ended up with the best attendance, and those who began with the worst attendance ended up with the worst attendance.

- The strong negative predifference correlation for attendance tells us that those who started out with the worst attendance made the greatest gains.

TABLE 6

THE GPA/ATTENDANCE VARIABLE CLUSTER
(CORRELATION MATRIX) -- PHOENIX SAMPLE

	GPA			ATTENDANCE		
	PRE	POST	DIFFERENCE	PRE	POST	DIFFERENCE
GPA						
PRE	--	--	--	--	--	--
POST	-.28	--	--	--	--	--
DIFFERENCE	-.85*	+68*	--	--	--	--
ATTENDANCE						
PRE	+.78*	+.61	-.53	--	--	--
POST	+.24	+.61*	+.16	+.69*	--	--
DIFFERENCE	-.71*	+.31	+.71*	-.92*	-.35	--

*Significant at $P < .05$

TABLE 7

THE GPA-ATTENDANCE-ASPIRATIONS VARIABLE CLUSTER
(CORRELATION MATRIX) -- PHOENIX SAMPLE

	GPA	ATTENDANCE		ASPIRATIONS	
	POST	PRE	POST	PRE	POST
GPA					
POST	--	--	--	--	--
ATTENDANCE					
PRE	+.61*	--	--	--	--
POST	+.61*	+.69*	--	--	--
ASPIRATIONS					
PRE	+.30	+.63*	+.72*	--	--
POST	+.76*	+.42	+.77*	+.87*	--

*Significant at $P < .05$

TABLE 8

PATTERN OF ATTENDANCE AND PERFORMANCES FOR FOUR PHOENIX STUDENTS

STUDENTS	Pre-Performance Sources	Pre-Attendance (Percentage)	Difference In Attendance	Post Attendance (Percentage)	Post Performance Sources
A					
SCORE	30	60	+25	85	26
(RANK)	(4)	(10)	(1)	(8)	(9)
B					
SCORE	25	70	+22	92	18
(RANK)	(6)	(9)	(2)	(6)	(10)
C					
SCORE	13	71	+20	91	13
(RANK)	(11)	(7.5)	(3)	(7)	(11)
D					
SCORE	21	75	+19	94	29
(RANK)	(9.5)	(6)	(4)	(4.5)	(6)

Table 8 examines in detail the four out of ten students who made the greatest gains in attandance.

- Looking at the ranks, we see that these students started out with among the worst attendance and ended up with among the worst attendance, even though they made the greatest gains in attandance.

- With respect to GPA, however, the story is different: there is no pre/post correlation, so that the ordering of the students changed from the pretest to the posttest.

- Those who started out with the worst GPA made the greatest gains and finished up with the best GPA scores.

- GPA and attendance are highly correlated variables, with the pretest, difference, and posttest scores all being significantly positively correlated, suggesting that there is a common factor, which we might call commitment to school, which is represented by these two variables.

We might summarize all of these results with the observation that the Phoenix program seems to build commitment to school in its students. With respect to attendance, it seems to strenghten the commitment that was already there, so that those who started out with reasonably good attendance were still the best after being in Phoenix.

This conclusion is further strengthened by yet another source of data: at the time of the pretest, when each Phoenix student had spent at least a month in the program, there was a borderline relationship suggesting that Phoenix students were less inclined to disrupt the class than the comparison group students. By the time of the posttest, this had become a significant intergroup difference, further emphasizing that the Phoenix program builds commitment to school.

The "$64,000 question" is to what degree does this commitment survive the transition back to the home school for those students who make that transition? Unfortunately, we can shed no light on that question with the data we were able to obtain.

2. The Three Objectives of the Phoenix School

a. "To Provide Counseling for Students..."

A great deal of attention was spent during the course of the process evaluation on trying to understand the workings of the progress seminars, which is the label which the program gives to its daily group counseling sessions. Each of the three data collectors attended at least one group counseling session; and Dr. Ruth Newman, a nationally renowned expert on the use of group counseling in school, attended one session as a consultant to the program. Her observations were especially helpful in putting our understanding of group counseling into focus.

The sessions observed by the evaluators covered a wide range of issues and a broad span of emotional intensity. Several of the sessions observed involved sensitive individuals exploring deeply personal and intimate conflicts. On the other hand, one observed session seemed very "mechanical" as the group methodically went from person to person asking for positive "strokes" for a student who behaved in an approved manner.

The process evaluation suggested a number of potential shortcomings with respect to counseling at Phoenix:

- A variety of evidence from the program, from the experiences of the evaluators, and from the literature suggests that drug abuse in adolescents masks an underlying foundation of fear and rage, often based on the conditions of the youth's family life. The counseling in Phoenix explicitly, according to the principal and staff, does not seek to deal at this level. In the more intense sessions, this level seemed to be trying to emerge. What kind of permanent change in drug abuse, self-esteem, or other basic qualities can be achieved if this level is not effectively dealt with? In recognition of this, the principal did encourage the students to seek professional psychological counseling outside of Phoenix; and nine of the eleven students in the sample were doing so.

- The responsibility of the staff to perform the dual roles of leaders of group counseling sessions and of teachers is an example of the blurring of boundaries in the school. The teachers must slide from being either a trusted, sharing companion and/or affective group leader to being a teacher--a task-setter, rule enforcer, and evaluator. It is possible that this dilutes the effectiveness of both roles.
- The staff and principal try to make themselves available as supportive persons to the students at all times which tends to blur time boundaries. This seems to result in excessive drain on the staff and principal and a shift in assumed responsibilities for discipline from the parent to the school that is not in the long run beneficial to anyone--parent, child or teacher. Disciplined control over time boundaries has frequently been observed to be an important component of an effective therapeutic setting.

Can one measure the impact of the counseling on the students in objective terms? Table 1 on page 14 of the Phoenix School's proposal suggests that there are some measures that would be appropriate.

- One expected outcome is improved self-concept which can be measured by a pre- and post-self-esteem inventory.

- A second expected outcome is improved coping skills, but no measure is suggested.

- A third expected outcome is the reduction of drug/alcohol usage, the proposed measures being school records reporting drug/alcohol related incident and student self-report.

With regard to the first outcome, improved self-concept, we do have the Self assessment Scales. These scales showed no pre-/posttest change for the Phoenix students, and only a few significant differences between the Phoenix and comparison group students. In both the pre- and posttests, the comparison group students were superior in terms of the social sources scale (See Table 1):

> Relative need for approval of other persons or concern over what others think and feel about us is described in this scale. A high score indicates less vulnerability to other persons' judgements when imputing self-worth.

It is possible that the lower self-concept of the Phoenix students in this regard may reflect the fact that being in the Phoenix School may involve carrying a negative label and becoming more sensitive about what others think about you.

Also in Table 1, we find that the comparison group at the time of the pretest starts out with more self-esteem in terms of performance sources:

> This scale summarizes persons' dependency upon achieving high levels of performance to maintain a sense of personal worth. A high score suggests greater ability to maintain high self-regard in the face of imperfection, failure, or lowered productivity.

This difference disappears by the time of the posttest. This variable figures in other patterns of results, as discussed in Section I.C.3.c. below, and is the only Self-esteem Scale to stand out in the results.

Overall, there is not a clear indication that the students, over the period covered by the study, show any improvement in self-esteem.

The second expectation--improved coping skills--we do not know how to measure, and the Phoenix proposal makes no suggestions either. The third measure, reduced drug/alcohol use, as we have already demonstrated did not change.

In summary, the process evaluation suggests that there may be serious problems with counseling as it occurs at Phoenix. Outcome evaluation indicates that two of the three outcomes predicted by the program's proposal to result from effective counseling did not occur, and the third outcome was not measurable.

b. <u>"To Provide an Individualized Academic Environment..."</u>

From the perspective of the process evaluation, the Phoenix School does not provide individualized instruction as it is commonly understood. The staff does not establish individualized academic plans based on a careful assessment of need, and it does not have the resources to carry out individually tailored academic programs even if such plans were established. In fact, the staff were not aware that this was an objective of the program until the evaluation staff began querying them about it.

At the same time, however, the staff does make outstanding efforts to provide individualized help to students when needs are observed, and the small size of the classes facilitates this. As pointed out above, academic achievement may not be the appropriate primary goal of the academic program for students who come from a background of nonparticipation in school.

The academic program was observed to challenge the poorer students, but not the better students.

The Phoenix proposal suggests that the academic program be evaluated in terms of:

- Credits in relevant courses as measured by a review of cumulative records.

- Significant progress in reading, language arts, and mathematics as measured by pre- and posttests, using Metropolitan Achievement Survey and Instructional Tests in Reading, Mathematics, and Language Arts (Phoenix proposal, p. 14).

The demonstrated improvement in GPA seems to fulfill the first criterion; but for reasons stated above, we do not find this to be a reliable measure of academic progress.

We had pretest scores on the MAT for mathematics, reading, and language arts and had hoped to be able to obtain posttest scores. A serious error was made in the administration of the posttest MAT's by a program staff member, which made it impossible to use the scores. This error, unfortunately, eliminated the possibility of objectively assessing achievement on this objective.

c. "To Establish a Partnership Between the School and the Home..."

This is the one objective for which we have the least information. No objective instruments were included to get at this objective, and the project officer directed us not to make this a focal issue for the process evaluation, not because this was judged to be unimportant but because of the feeling that the limited process evaluation resources were needed to address other, more critical issues.

A few observations can be made with respect to this objective based on the process evaluation:

- Parents attended weekly parent meetings as a condition for admission to the school.

- The staff attempted to obtain parental involvement in recreational and social activities carried on outside of school hours. (Out of twelve activities studied, seven had no parent involvement, three had two parents show up, and two had a good turn out, 12 parents coming to both of these activities.)[1]

[1] Of the seven events which parents did not attend, it is possible for one or more of these that they were not strongly encouraged to paticipate.

- Information obtained in interviews and discussions suggested that parental expectations about the dimensions of responsibility for discipline sometimes seemed distorted. Anger also seems to be focused occasionally on the school for the child's misbehavior.

In general, although this area was not fully studied, indications were that a great deal more parental involvement would be desirable. There is some suggestion on the part of Dr. Newman that in some of the homes the drug using child is a "scape goat" for the parent's inability to cope with family life. Where this is the case, the parents actively resist any ability the school might have to get the child off drugs. There was evidence that this was occuring for some of the students. Parental involvement seems to be a very difficult area, and the Phoenix School may well have to do a great deal more experimenting before it is effective in this regard.

3. Other Results

A few important findings which do not directly relate to the program's goal or objectives are reviewed in this section.

a. Aspirations

The aspirations scale seems to measure degree of maturity of the youths' aspirations towards the future. Maturity on this scale seems to reflect awareness of Gail Sheehy's first passage, "pulling up roots," the conflict between wanting to break out of the nest and wanting to retreat back into the nest for safety.

The results in Tables 1 and 7 suggest the following about the meaning of aspirations for the Phoenix students:

- The Phoenix students did not differ from the comparison group on this variable in terms of pretest, difference, or posttest scores.
- The Phoenix pre- and posttest scores do not differ from each other.
- The Phoenix pre- and posttest scores are highly positively correlated.

All this suggests that this variable is stable, not affected by the program, and the ordering of the students is not affected also.

More importantly, aspirations seems to be a predictor of who will come away from Phoenix with the strongest commitment to school, being significantly positively correlated with both post-GPA and post-Aspirations. This could be a measure which might indicate which students would benefit most from the academic program.

b. Activities

This variable seems to reflect creative, selfless activities vs. the usual leisure-time activities of most adolescents, watching TV, hanging out with friends, etc. This brings to mind the alternative theory, which suggests that the more one does selfless, creative activities, the less one is likely to abuse drugs.

The results show no effect with this variable for the Phoenix students, but there is some indication that this may be operative for the comparison group students. This suggests that the Phoenix program may be sufficiently strong so as to preempt the impact of "alternatives" on drug abuse; but, lacking such a vector, the comparision group can display the positive impact of such "alternatives" on drug abuse.

These correlational findings must be viewed in the larger context that said that there were no overall changes regarding drug abuse for either group.

c. Performance Sources

Tables 8 and 9 provide two interesting findings with respect to performance sources (defined above in Section I.C.2.a):

- Those students who have the greatest commitment to school both going into and coming out of Phoenix made the greatest gains in terms of performance sources; that is, these students became less willing to lose their sense of self-worth just because an enterprise or project didn't turn out well.

- On the other hand, those students who started out with the poorest attendance records made the greatest gains in attendance and still ended up with poor attendance records.

- The four students who consistently seemed to have less commitment to school (Table 8) did poorly in performance sources on both the pre- and the posttests.

This is the one self-esteem variable which the program seems to affect, and it seems to do so for those students who start out with and end up with the strongest commitment to school. This suggests that these students come to adopt a more mature attitude towards the tasks which they undertake. This seems like an appropriate outcome for an academic program which tends to focus on restoring effective learning habits.

TABLE 9

VARIABLE CLUSTER: ACADEMIC HOURS, ASPIRATIONS, ATTENDANCE, AND PERFORMANCE SOURCES (CORRELATION MATRIX) -- PHOENIX SAMPLE

	Performance Sources	Post Attendance	Pre Aspirations	Academic Hours
Difference in Performance Sources	—	—	—	—
Post Attendance	+.71*	—	—	—
Pre Aspirations	+.69*	+.72*	—	—
Academic Hours	+.63*	+.69*	+.53	—

*Significant at $P < .05$

d. The Referral Process

The referral process seems, in most instances, to be excessively lengthy and cumbersome and therefore seems to dissuade students who might well fit the program's criteria from ever getting to the program. If a student has an immediate need, a wait which could last many months may seem out of the question.

Counselors described two successful referrals that seemed to go more rapidly because the student asked to go to Phoenix. When that happens, the counselor can go directly to the PPW without the waiting period for the SARD meeting.

e. The Approach to Discipline

In a recent survey, a number of the students who had completed the Phoenix School program cited the approach to discipline as a major element in terms of its impact on their lives. This finding encouraged us to pay special attention to the discipline strategy in the process evaluation.

Underlying the apparent casualness of the school is a highly structured system of reinforcements meant to elicit behavior changes. The first fact the new student will discover is that he/she is on Level 0 and that he/she will be on Level 0 for at least two weeks. Each level carries with it certain behavior expectations and certain privileges. A student is promoted or demoted from level to level depending on his/her behavior.

Drops in levels, suspension from school, and in-house suspensions are the three primary modes of punishment for what are considered the most serious infractions at Phoenix: drug and attendance violations.

To counter the peer pressures which impel youths to take drugs, a main focus of the school is to create "positive peer pressure"--a counter-culture movement within a well-defined culture, trying to direct youth away from drug use. To achieve this, the school:

- Discourages getting high or any discussion of drugs at all
- Encourages youth to report drug usage on the part of their peers
- Attempts to help the students to cultivate alternative nondrug ways of having a good time
- Involves students in the selection of new students, so that they affirm the values of the school
- Encourages students to participate in the developing of "learning experiences" for the punishment of drug violations on the part of other students

f. Conclusions

1. Some Caveats

Before presenting the conclusions, it would be well to place them in a context of two caveats regarding the evaluation process and its limitations. Evaluation research is not suited to see all dimensions of a program well, and some of those may be areas where Phoenix is having positive outcomes. However, one must not necessarily assume that the unknown is always in one's favor; it is just the unknown.

This study, as has been mentioned above, is only a short-run evaluation measuring program effects on students who have been in the program 10 months (N=1), 7 or 8 months (N=7), or 4 or 5 months (N=2) at the time of the posttest. None of these students have completed the full twelve months of the program, and none of them have returned to their home school environment so that we cannot assess the impact of the "full" Phoenix program on any students in the sample. A longer timeframe might turn up results which are not visible in a short-run evaluation.

2. What Kind of a Program Is Phoenix Intended To Be?

Before proceeding to draw some conclusions regarding how well Phoenix fulfills the goal and objectives in its proposal, some information which has been provided to us raises the questions as to whether these explicit goals and objectives are a valid reflection of the program's purposes. The issue has been raised in two respects:

a. Is Phoenix a Treatment Program?

It is clear from the explicit goal and objectives that the Phoenix program is much more than a treatment program in the classical sense of drug and alcohol treatment. It focuses on repairing school habits and commitment, which is not necessarily associated with the treatment of drug and alcohol abuse. The question is whether the Phoenix School is even a treatment program in part.

The issue came into foucs because of a discussion which the senior evaluator had with the principal of the Phoenix School, after the latter had studied an earlier draft of this report. The principal stated that the evaluation report had missed the point because it dealt with the Phoenix School as though it were a drug and alcohol abuse treatment program when in fact it is not a treatment program.

The second part of the three-part goal states, "to reduce their drug/alcohol usage." (Phoenix proposal, p.1) This is a treatment goal. If the Phoenix School is not in part a treatment program, then it should explicitly modify its goals so as to leave this phrase out of it. We had no knowledge until after the study was nearing completion that the program was not involved in treatment. We addressed the goal and objectives as stated in the proposal, since we did not know that they were not entirely appropriate at the time of the study.

If the program goal has changed, then part of what follows may not be relevant. If so, we apologize, since considerable effort went into assessing impact on drug and alcohol use, an assessment which would not have been made if this treatment dimension were not to our understanding part of the program's goal. If the goal has changed in this regard, it seems only appropriate that the program issue a revised goal that accurately reflects its purpose.

b. Is Counseling Important as a Feature of Phoenix?

The first objective states "to provide counseling for students experiencing drug/alcohol abuse problems to enable them to cope more effectively with personal and school problems." Further on in the proposal, it is made clear that the expected outcomes of counseling include improvements in self-esteem and reductions in drug and alcohol abuse (see Phoenix proposal, pages 5 and 14). A good deal of the discussion seems to suggest that counseling is intended to provide "treatment," so part of this question is tied to the answer to the question in the preceding subsection.

Furthermore, discussions with the principal and with the staff suggest that there is considerable ambiguity in their own thinking about the role of counseling at the Phoenix School. We will try to raise some of these ambiguities here, as we understood them. Our concern is that until these ambiguities are worked out and the program takes a more coherent stand with respect to the role of counseling at Phoenix, it is not likely that counseling will be very effective.

On the positive side, the program staff does conduct the counseling sessions regularly in a serious manner. The staff, individually and the group as a whole under the principal's leadership, have taken steps during the period in which we observed the program to improve their abilities to provide counseling. Also, the principal, with success, actively encourages the program's students to obtain professional counseling outside of the Phoenix program. Finally, the students have access to the principal and to staff members at any time of day or night for the discussion of their problems. All of this speaks to a commitment to effective counseling at Phoenix School.

Pointing in an opposite direction are the following statements and observations:

- 'The staff are teachers and are not expected to be able to provide professional counseling.' (paraphrased)
- 'We carefully screen out the emotionally disturbed children so that our students do not need intensive psychological counseling.' (paraphrased)
- The staff is getting burned out (or seems to us to be) because of the lack of boundaries with regard to when the students can gain access to them, creating a resentment towards the counseling role.

How important is counseling at Phoenix? What is it there to deal with? What are the needs of the students and is the program prepared and/or able to deal with these needs? These are the kind of questions that need to be addressed.

Working as we must from the explicit goal, objectives, and program plan as set forth in the Phoenix proposal, we will assume that counseling is a key aspect of the program and that it has in part a treatment focus. If these explicit guidelines regarding counseling are no longer appropriate, then they should be replaced with new ones that are more on target with what the program seeks to do in this area. Our impression is that the program would do well to work out its intentions in the area of counseling more explicitly and then reformulate its plans appropriately to reflect these new, explicit objectives.

3. Is the Phoenix School Fulfilling Its Goal and Objectives?

The fundamental goal of the Phoenix program is to provide a drug/alcohol free educational environment for students involved with drugs/alcohol to reduce their drug/alcohol usage and to enable them subsequently to function effectively in the regular school program.

Summarized below are the findings of the study regarding the program goal and the three program objectives.

The Phoenix program goal has three parts -- looking at each one by one, the answer to the basic question is yes, probably not, and maybe.

Yes--the program is effectively providing a drug-free school environment for students, many of whom were probably regular users of drugs while in school before coming to Phoenix. This is a valuable achievement which is fundamental to whatever gains these students make while at Phoenix. Hopefully, when they return to regular schools, they will carry with them the habit of being drug-free during the school day.

Probably Not--Despite the programs effectiveness in virtually eliminating drug usage during the school day, self-reports by students indicate that the program is having no effect on reducing overall drug and alcohol usage. Indeed, looking at the student data, it is hard to imagine a cluster of evaluation results which could demonstrate this finding more conclusively. However, all parents report that their children use drugs less than before they went to Phoenix. While this appears to be a contradiction, we feel that the weight of the data--the consistency of response from pre- to posttest, the lack of difference between treatment and comparison groups, and the supportive findings from other measures--all suggest that the picture painted by the student self-report is more accurate than that provided by this item from the parent survey.

The Phoenix School may well be too brief and superficial a program to impact such profound habits. It is probably correct in thinking that it does not belong in the treatment business, and its goal should be reformulated to reflect this; or the program should be profoundly redesigned so as to have the "weight" required to do effective treatment.

Maybe--the program appears to be strengthening the students' commitment to school and rebuilding good school habits, as demonstrated by all of the students in the sample. The only hesitancy preventing our labeling of this third aspect of the goal a success is our inability to observe the degree to which the improved commitment and habits demonstrated during a student's stay at Phoenix survive the transition back to a regular school.

b. The Objectives

The first objective is to provide counseling for students. The program does provide counseling, but it does not seem to be achieving the explicit outcomes expected in two out of three respects, i.e., decreased drug and alcohol use and improved self-esteem (the Phoenix proposal, p. 14). The counseling appears to be suffering from a number of problems, not the least of which appears to be an ambiguity regarding the role of counseling at Phoenix. The program is, therefore, judged not to be doing particularly well in fulfilling the first of its three objectives.

The second objective is to provide an individualized academic environment; the program is not providing an individualized academic environment, and its resources and physical setting are not conducive to doing so. It does not appear to be achieving significant academic gains, at least not for the brighter students. This may not be the appropriate focus of the academic program. The program is doing very well in repairing learning habits, and this is probably what is needed most by the students. There is reason to believe that an academic program can probably not do well if it tries to focus equally on academic gains and on repairing learning habits. Given this problem, the choice of the program to focus on improving learning habits seems clearly to be the appropriate one for this group of students so that overall the program may be more effective academically by not fulfilling this objective. The failure to fulfill the second objective may contribute to the program's ability to fulfill the third objective of the goal.

Unlike the counseling component, the program appears to have no ambiguity and to be very coherent with regard to its academic goals. This seems to be consistent with the principal's observation that the staff consists of teachers and not counselors. We would agree with that. The Phoenix School appears to be staffed with committed, outstanding teachers who are doing an excellent job in carrying out the school's academic program.

The third objective is to establish a partnership between the school and the home. We know least about how well the school is doing with regard to this objective. What we have observed suggests that this is a very difficult area and that the school has put a great deal of effort into it. However, it looks like it needs a great deal more experimentation to bring it off, if such a partnership can be built at all. If Dr. Newman's observation regarding the tendency of parents in many homes to resist having their children improve with respect to drug and alcohol abuse is correct, it could in the long-run make any real achievements in this area well-nigh impossible.

c. Other Program Elements

This section draws additional conclusions which are not explicitly related to the goal and objectives.

Phoenix success in bringing about a drug-free school and an outstanding attendance record reflects in large part a strong, well-planned, and carefully executed disciplinary program, which articulates well with the academic program. The students themselves praise the effectiveness of the discipline at Phoenix.

Students who enter the school with the most mature aspirations seem to take the best advantage of the academic and discipline program and to come out of Phoenix (to the extent that the posttest foreshadows the orientation of students leaving the program) with the best commitment towards school.

The referral process is slow and cumbersome for the most part and seems to ensure that Phoenix is to some degree underutilized in a context in which there are many students out there who could readily qualify for Phoenix's services.

d. Overview

Building on what the principal has said and on what we have observed, we would say that the administration and staff of the Phoenix School are a group of outstanding teachers doing what teachers do best, creating an appropriate and effective academic environment and instituting effective, creative, and firm disciplinary measures for students who need such measures. As a result of these efforts, the students are rebuilding their learning habits in a drug-free environment.

At the same time, goals and objectives which require more than what good teaching can provide appear not to be well achieved at the Phoenix School, and there is no evidence to suggest that more profound changes in personality are occuring, such as reduced drug and alcohol use, decreased delinquency, and improved self-esteem.

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